



UID for DoD Maintainers

Expectations & Issues

EID (12V)194532636

Orig. Part No. (1P)1234

Serial No. (S)786950



Greg Kilchenstein, ODUSD(MPP&R)

**Depot UID Off-Site
23 February, 2005**



Outline



- **Why is DoD doing UID?**
- **What materiel is being uniquely identified?**
- **What's expected of the DoD Sustainment Community?**
 - **Maintenance**
 - **Supply**
 - **Transportation**
 - **Engineering**
- **What's in it for maintainers?**
- **Where are we now? Next steps?**



Why is DoD Doing UID?



- GAO Reports
 - DoD's Inventory exceeds both current & war reserve requirements
 - ...but key spare parts are too often not available
 - Lack of adequate accountability over material shipments
 - Lack of effective monitoring of defective spare parts
- Continuing problem with Audits of DoD Materiel
 - Require improved tracking and valuation of plant, property and equipment (PP&E) to comply with Federal Accounting Standards Advisory Board (FASAB) standards
 - Goal is having a "clean" audit opinion by FY 2007

"Strategic Business Imperative" – USD(AT&L)



“Strategic Business Imperative”

- On 29 July 2003, the Acting Under Secretary of Defense (Acquisition, Technology and Logistics) signed the “Policy for Unique Identification (UID) of Tangible Items – New Equipment, Major Modifications, and Reprocurments of Equipment and Spares”.
- Strategic outcomes were defined:
 - Enhance logistics, contracting, and financial business transactions supporting U.S. and coalition troops.
 - Enable DoD to consistently capture the value of items it buys, control these items during their use, reduce operating costs and combat counterfeiting of parts.
 - Enable DoD to make appropriate entries into its property accountability, inventory, and financial management information systems toward achieving compliance with the Chief Financial Officers Act.



“Strategic Business Imperative”

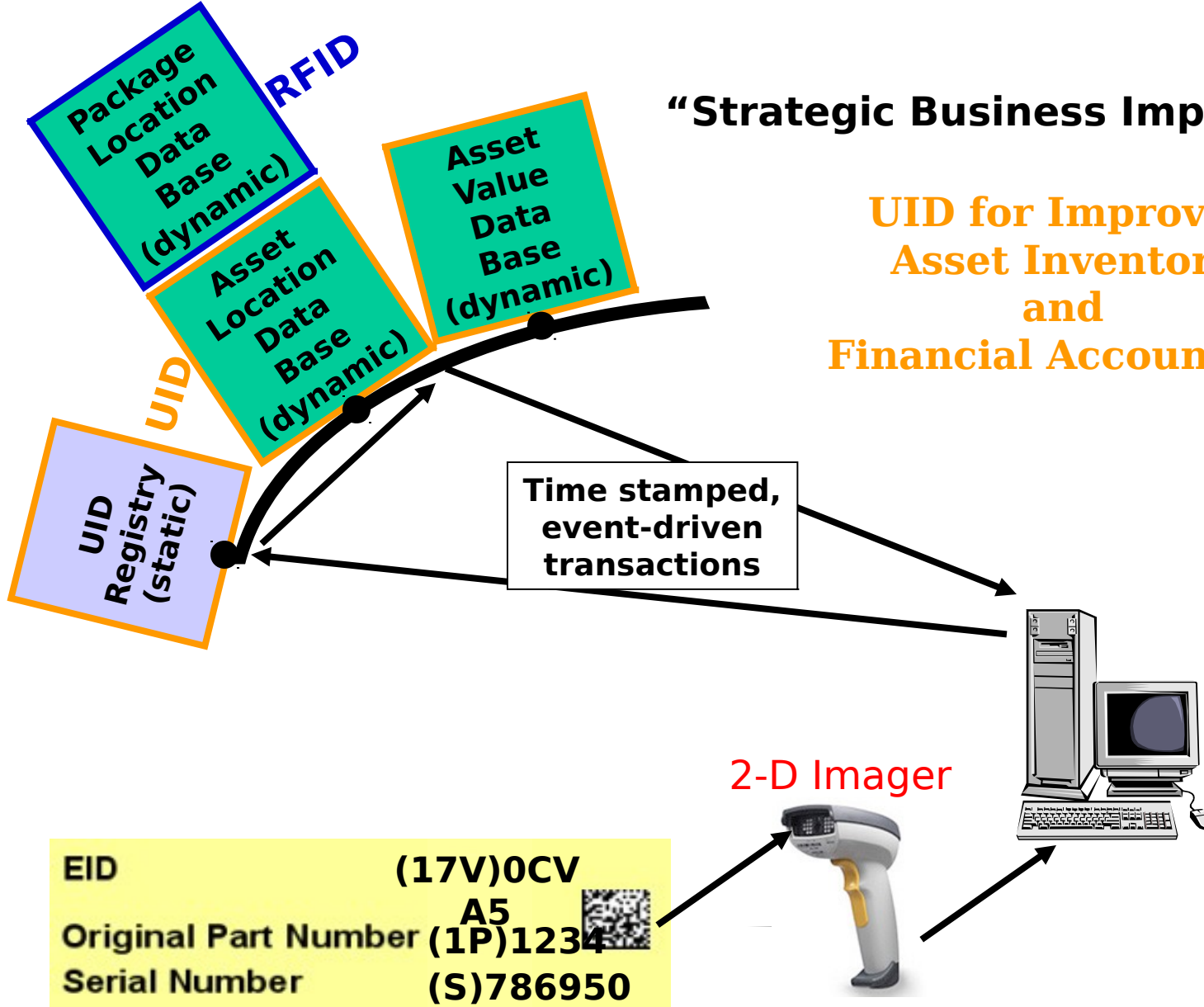
- **UID enables better accountability of DoD stuff...**
 - **How much stuff does DoD have?**
 - **Where did the stuff come from?**
 - **When did DoD get the stuff?**
 - **What contract was used**
 - **Where is the stuff today?**
 - **How much is the stuff worth?**





"Strategic Business Imperative"

UID for Improved Asset Inventory and Financial Accounting



 = DoD Data Bases

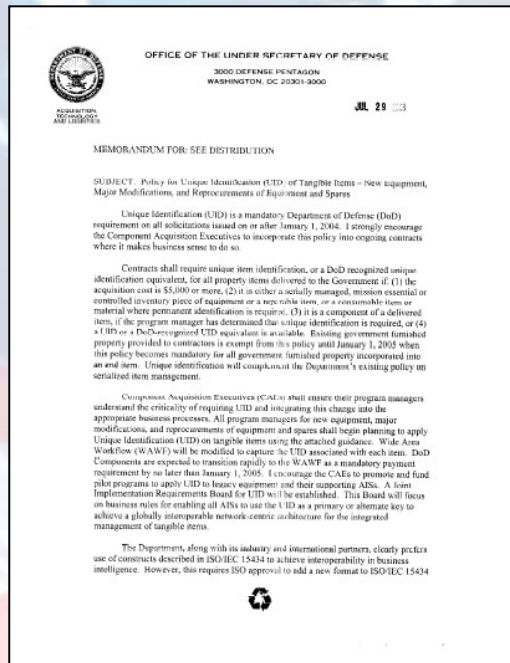
 = Service Data Bases



What Materiel is Being Uniquely Identified?

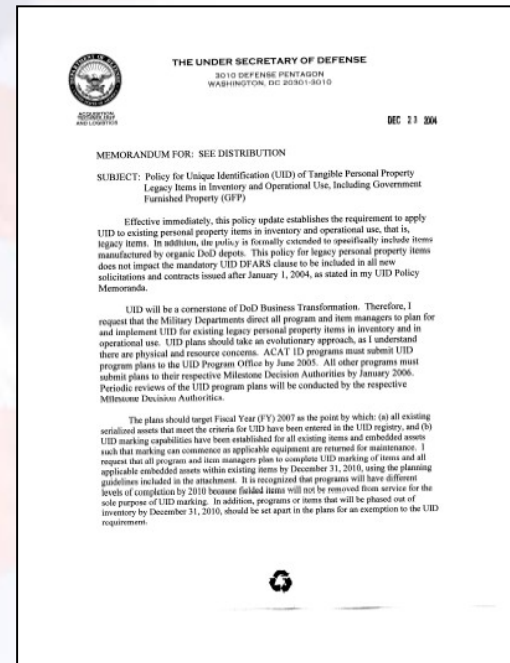


USD(AT&L) Policy Memo
29 July, 2003



- New tangible items
 - Begin NLT 1 Jan 2004
 - commercial purchases
 - Begin NLT 1 Jan 2005
 - depot manufactured items

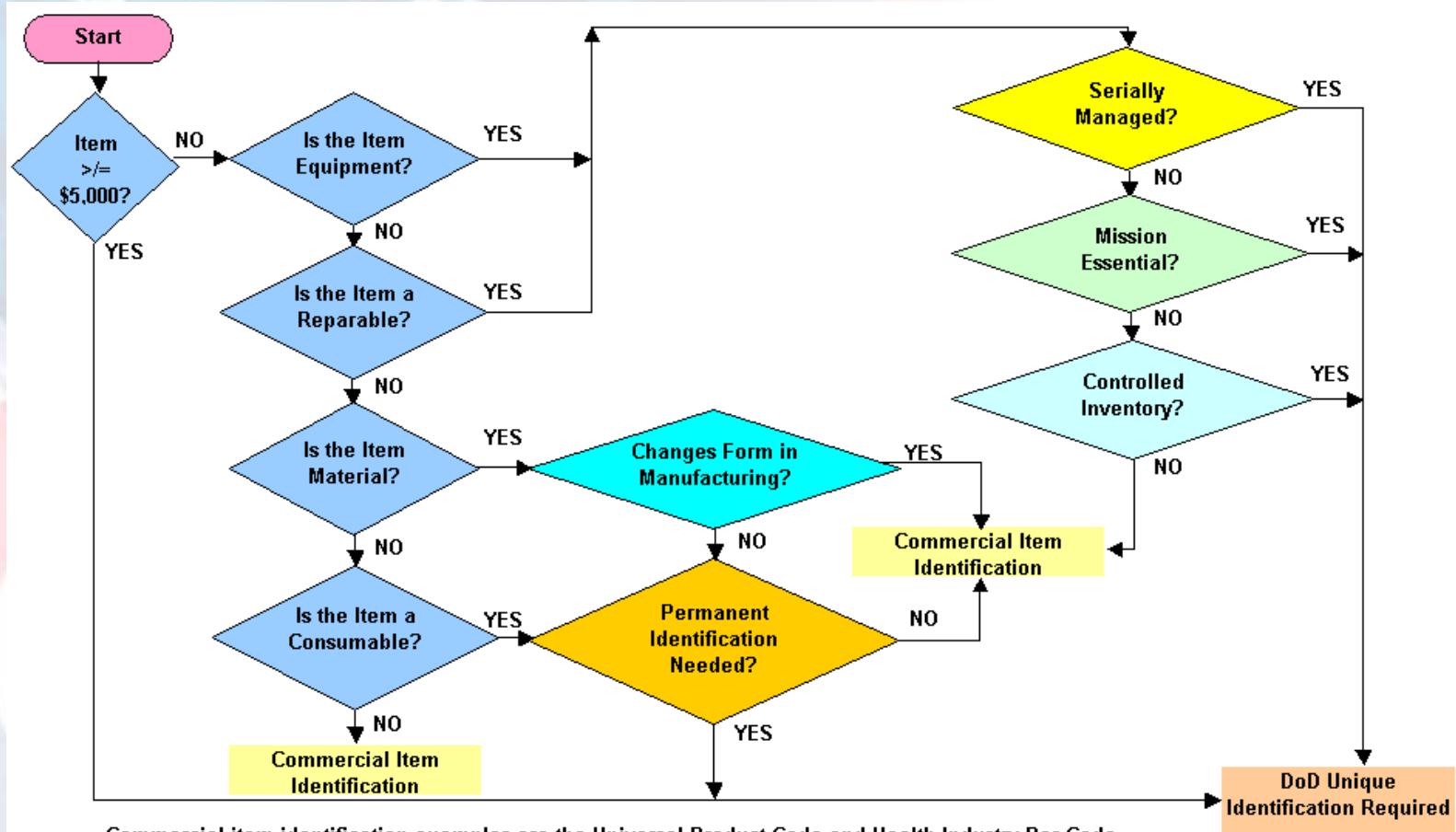
USD(AT&L) Policy Memo
23 December, 2004



- Legacy items in inventory
 - IOC Jul 2005
 - pilot depots
 - Complete NLT Sep 2007
 - all existing serialized items
 - Complete all items NLT Dec 2010



What Materiel is Being Uniquely Identified?



Commercial item identification examples are the Universal Product Code and Health Industry Bar Code

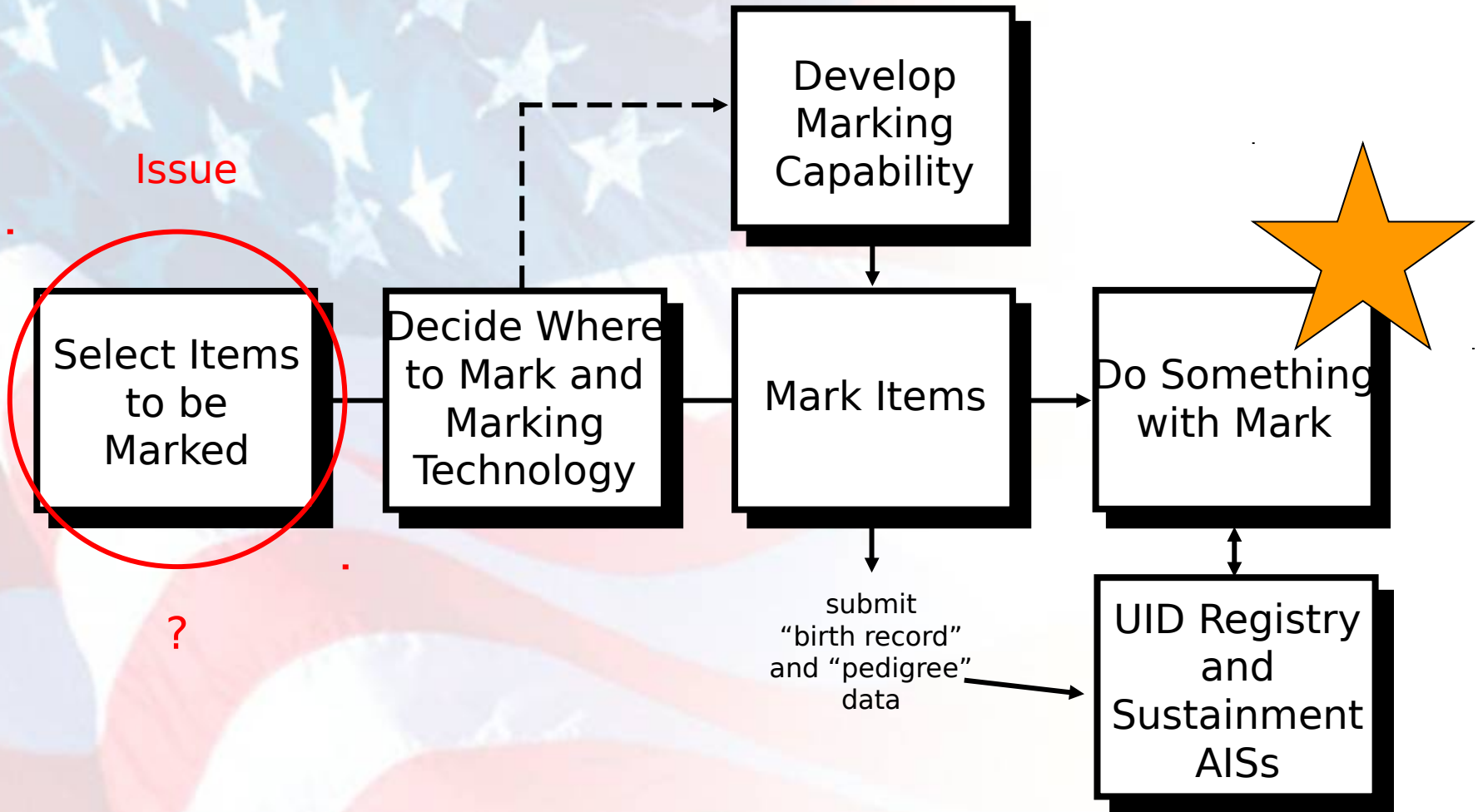


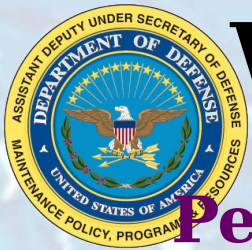
What is Expected of the DoD Sustainment Community?

1. Select which items to mark (?)
2. Mark depot manufactured items
 - Transact static “birth record” data to the UID Registry
 - Transact baseline “pedigree” data to the designated dynamic data base(s)
3. Mark legacy items
 - Transact static “birth record” data to the UID Registry
 - Transact baseline “pedigree” data to designated dynamic data base(s)
4. Update designated dynamic data base(s) every time a reportable trigger event occurs during the life of each UID item
5. Capitalize on the “pedigree” information available from the UID Registry and the dynamic data bases to make informed decisions about actions needed to improve DoD materiel readiness and reduce weapon system sustainment costs



What is Expected of the DoD Sustainment Community?

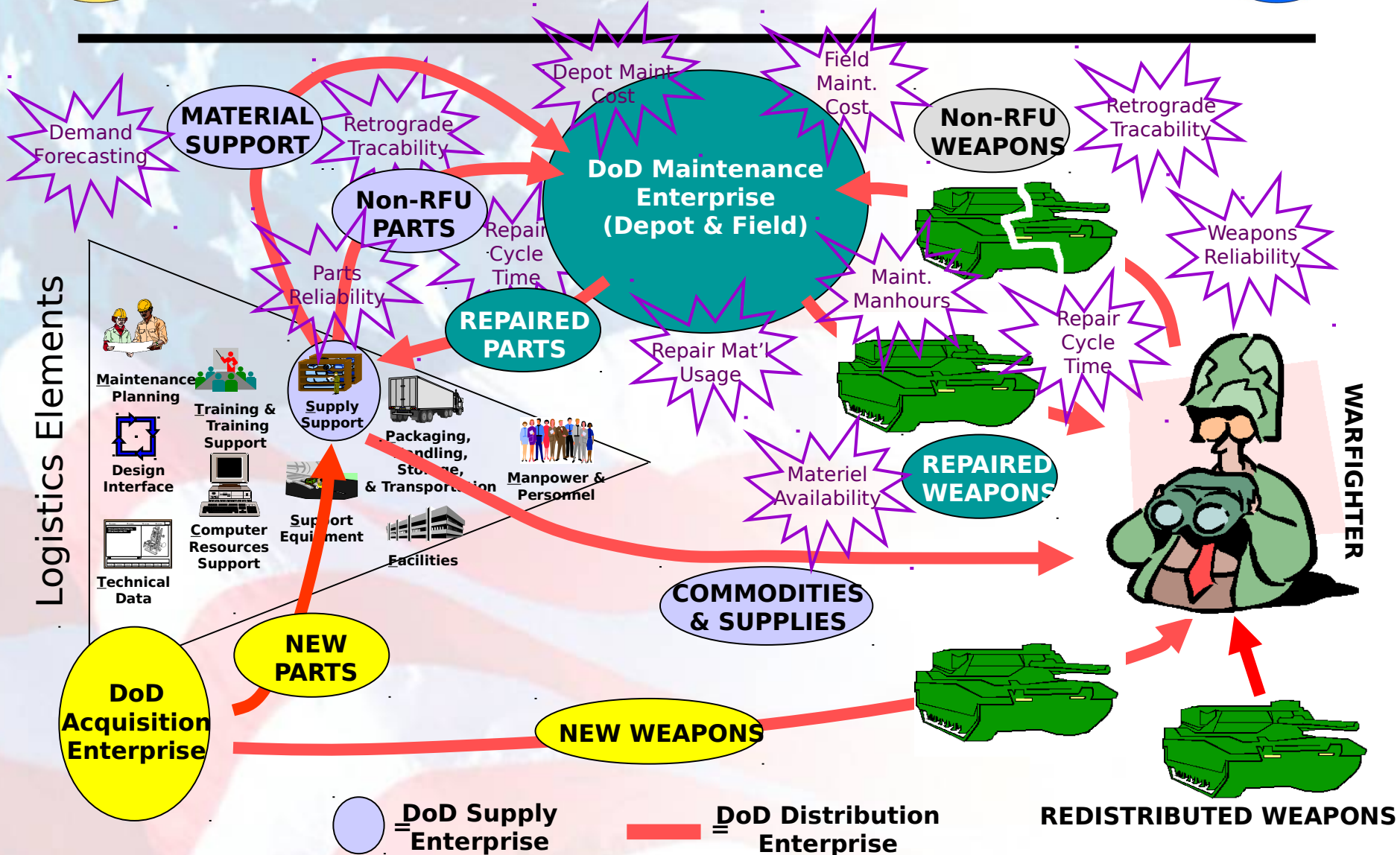




What's In It for Maintainers?



Sustainment Value-Chain Performance Evaluation at the Item Level

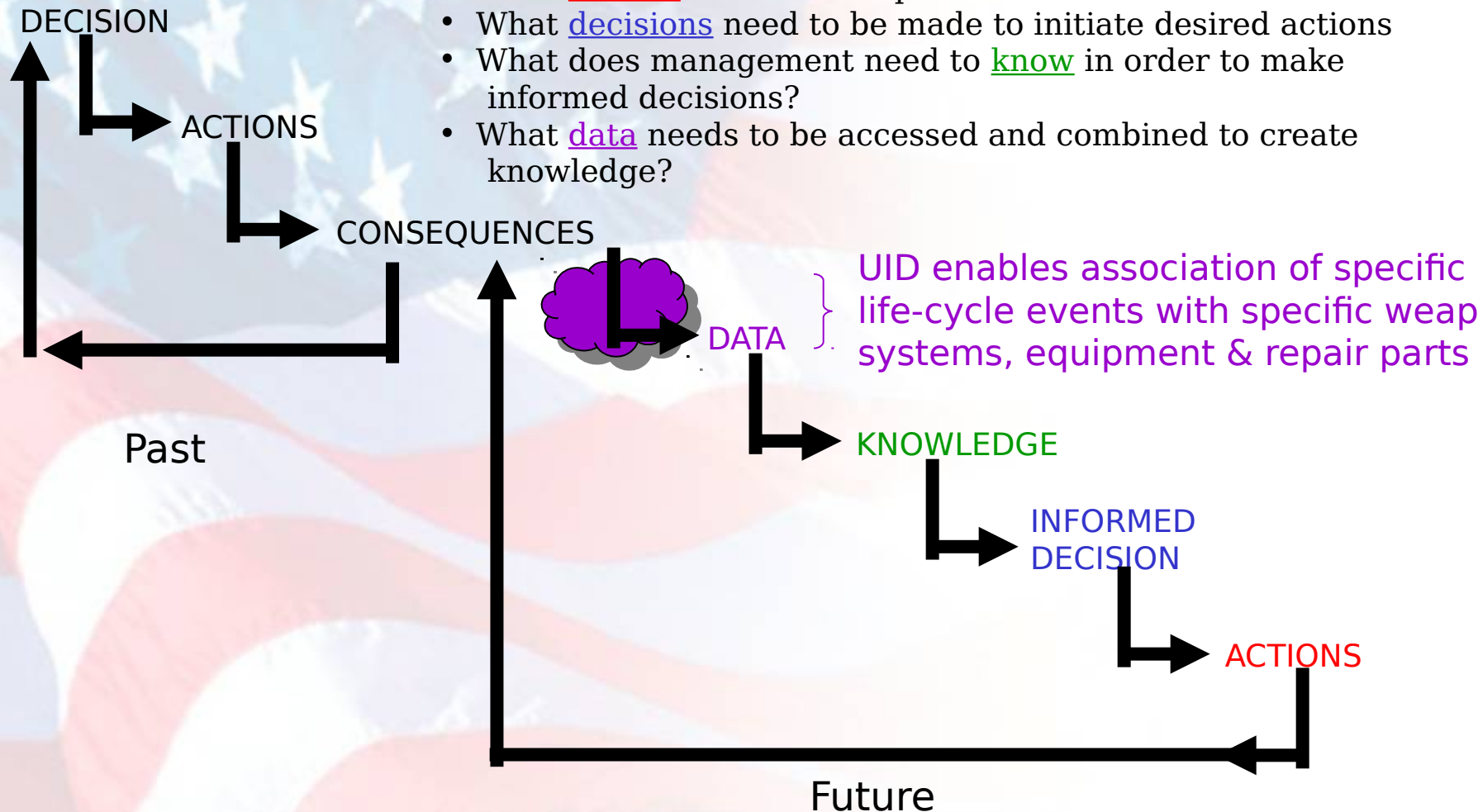




UID Objective: Informed Decision Making



- What **actions** need to take place?
- What **decisions** need to be made to initiate desired actions
- What does management need to **know** in order to make informed decisions?
- What **data** needs to be accessed and combined to create knowledge?





Informed Decision Making Integrating UID and SIM



- “It is Department of Defense (DoD) policy that the Military Departments and Defense Agencies will facilitate equipment maintenance by establishing a serialized item management (SIM) program to:
 - Identify populations of select items,
 - Mark all items in the population with a universally unique identification number, and
 - Enable the generation, collection and analysis of maintenance data about each specific item.”
- “SIM programs shall enable and encourage the effective management of populations of select items throughout their life cycle. Further, these programs shall focus on providing comprehensive and timely data about each item. SIM programs will build on existing serial number tracking (SNT) initiatives and leverage the continuing progress in automatic identification technology (AIT).”

***Policy for Department of Defense Serialized Item Management
Deputy Under Secretary of Defense for Logistics & Materiel***



Integrating UID and SIM



- “PMs shall optimize operational readiness through affordable, integrated, embedded diagnostics and prognostics, and embedded training and testing; serialized item management; automatic identification technology (AIT); and iterative technology refreshment”.

DoDI 5000.2 - 12 May 2003



Integrating UID and SIM



- “[Service maintenance programs shall]...employ Serialized Item Management (SIM) techniques to effectively manage populations of select items throughout their life cycle. SIM programs shall focus on providing comprehensive and timely data for each identified item. DoD materiel shall be equipped with Automatic Identification Technology (AIT) allowing for paperless identification, minimizing data entry requirements, and facilitating digital storage and retrieval of essential information including maintenance history. SIM programs shall build on existing serial number tracking initiatives and leverage continuing progress in AIT.”

DoDD 4151.18 - 31 March 2004



Integrating UID and SIM

Item Birth Record + Item "Pedigree" Data

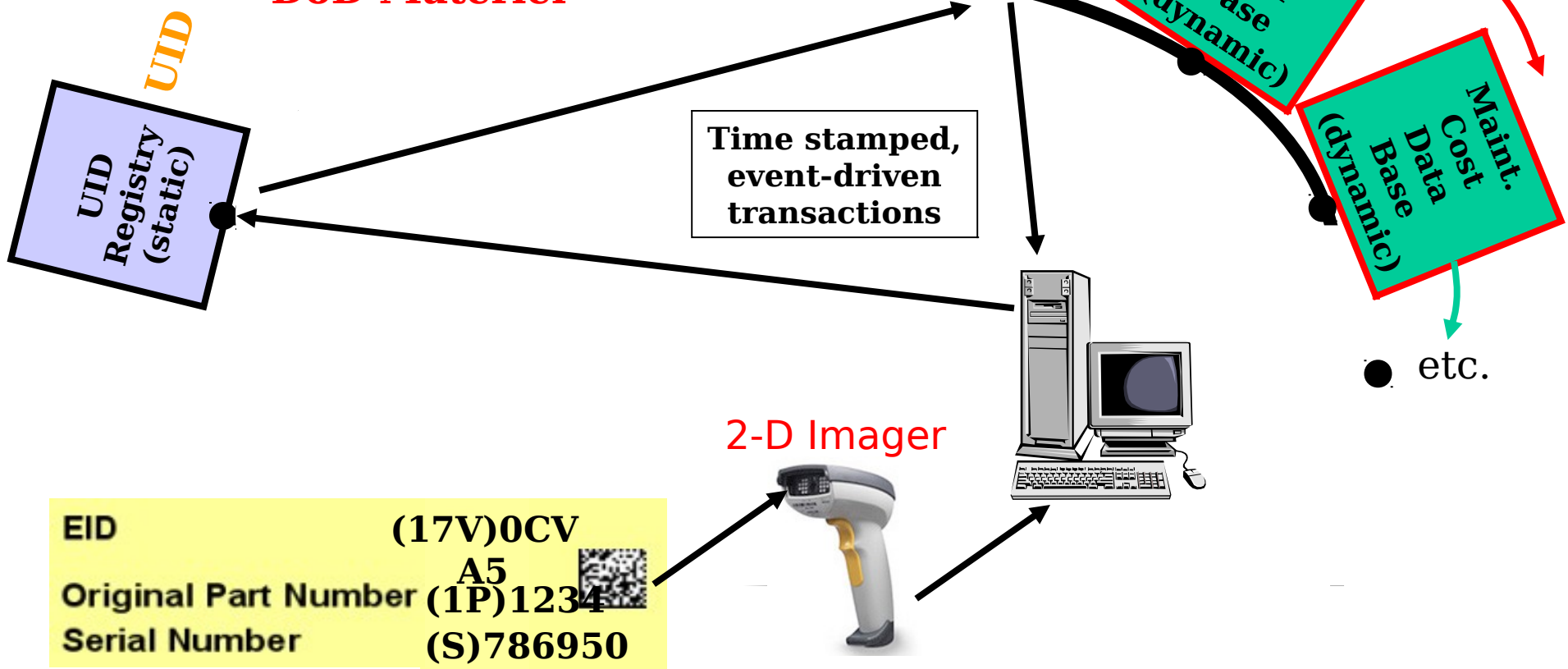
1. UID
2. AI
3. IAC
4. EID
5. Part no.
6. Serial no.
7. Description
8. Unit of measure
9. Quantity shipped
10. Contractor
11. Contract no.
12. CLIN/SLIN/ELIN
13. Unit Acq. Cost
14. Acceptance Code
15. Shipping Date
16. Ship-to Code



Configuration History
Usable On Code
Failure History
Malfunction Code(s)
Action Taken Code(s)
Current MTBF
Repair Location(s)
Repair Technician(s)
DLH/Repair
MH \$/Repair
Repair Mat'l/Repair
Mat'l \$/Repair
Cycle Time/Repair
Current MTTR
etc.

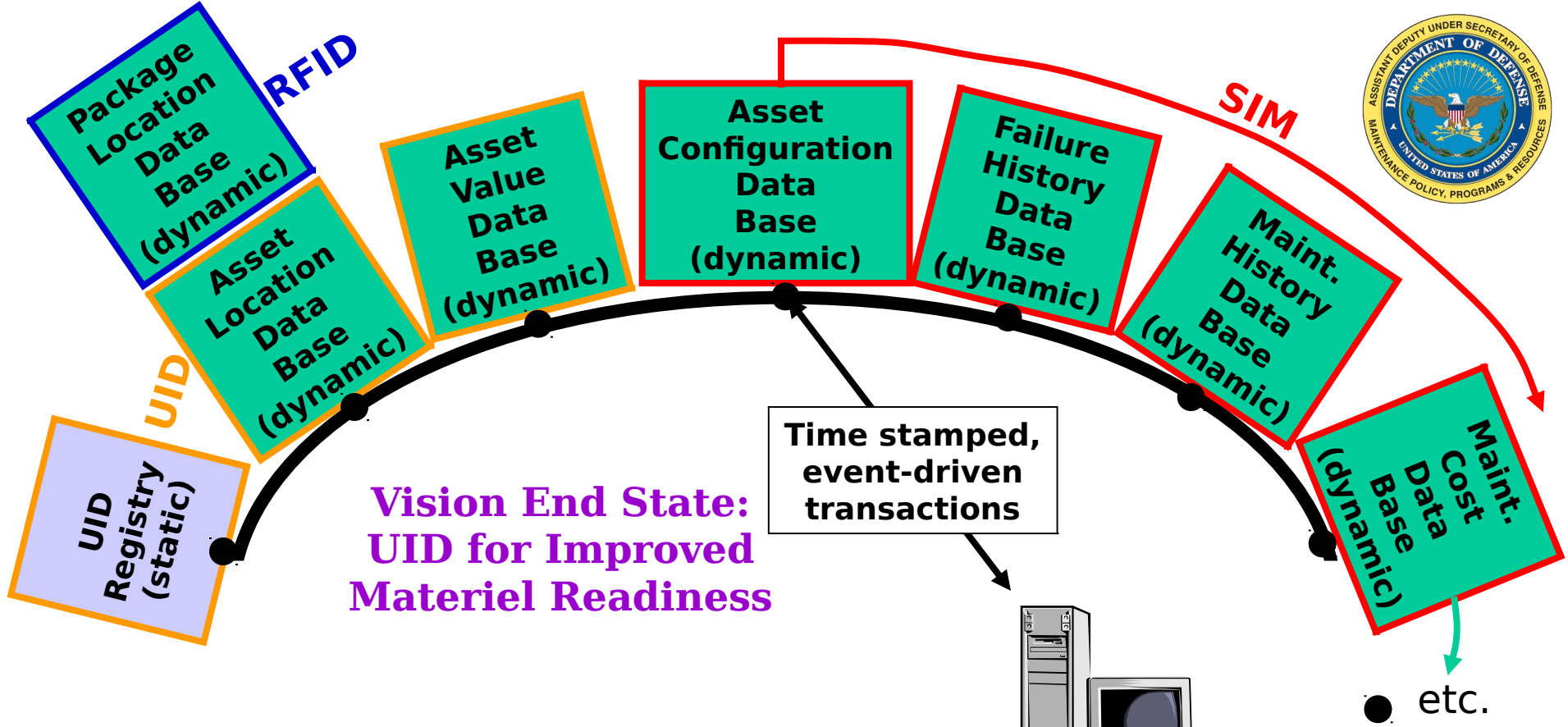


Integrating UID & SIM for Improved Maintenance of DoD Materiel



 = DoD Data Bases

 = Service Data Bases



**Vision End State:
UID for Improved
Materiel Readiness**

EID

(17V)0CV

A5

Original Part Number (1P)1234

Serial Number (S)786950

2-D Imager



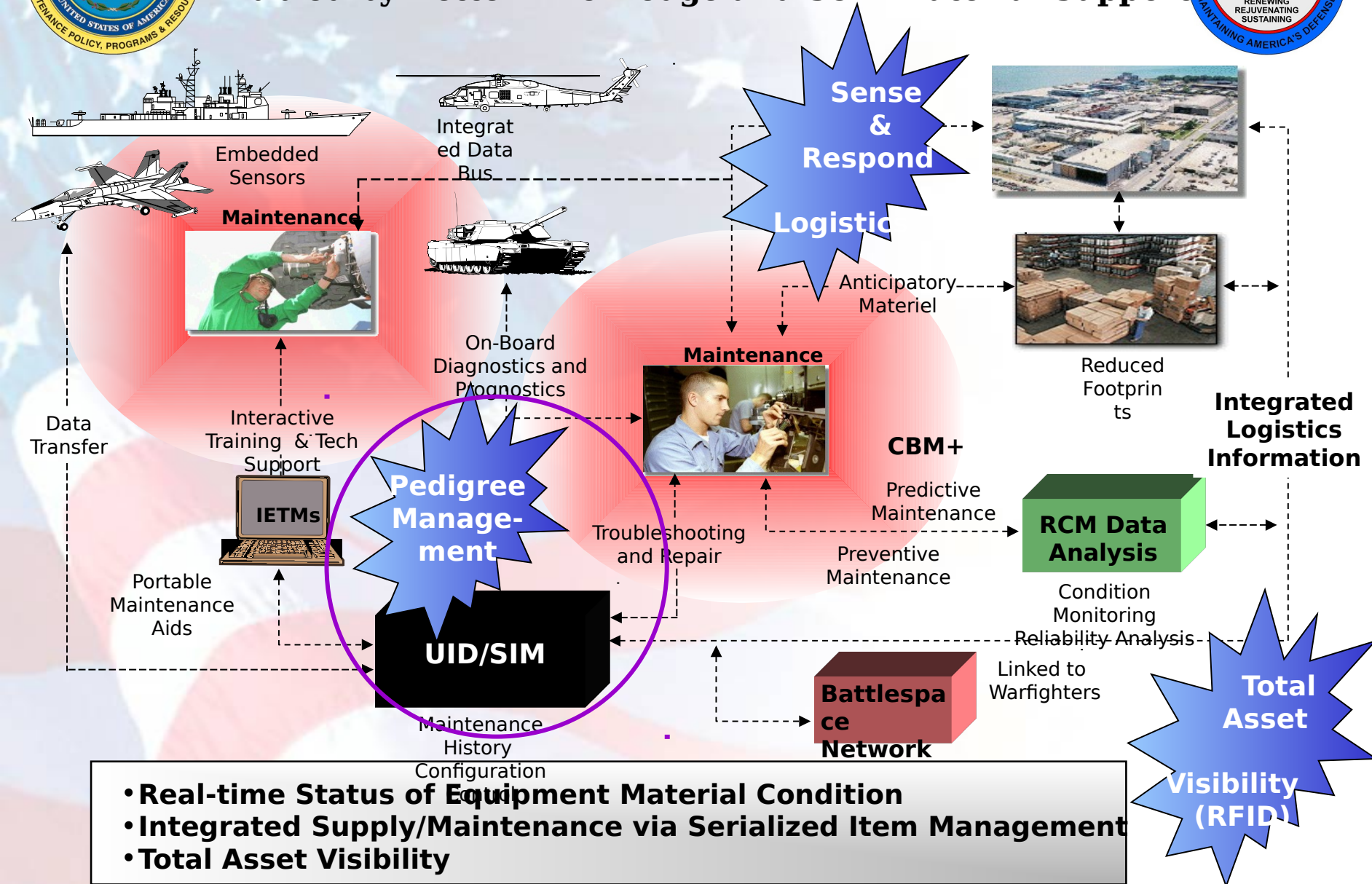
= DoD Data Bases

= Service Data Bases



Vision End State

Better, Faster, Cheaper Maintenance
Enabled by Better Knowledge and S&R Material Support





Where Are We Now?

Current implementation status

UID Enables Improved Material
Asset Tracking & Cost Accounting
(New Items)
Make Informed Decisions
Access Data
Transact Data
WAWF/AIT Infrastructure
UID Registry/Service DSS

UID for Improved
DoD Asset
Tracking
and Accounting

UID Enables Improved
Material Maintenance
(New Items)
Make Informed Decisions
Access Data
Transact Data
WAWF/AIT Infrastructure
UID Registry/Service DSS

UID for Improved
DoD Maintenance
(SIM/Pedigree
Mgm't)

UID Enables Improved Material
Asset Tracking & Cost Accounting
(Legacy Items)
Make Informed Decisions
Access Data
Transact Data
WAWF/AIT Infrastructure
UID Registry/Service DSS

UID Enables Improved
Material Maintenance
(Legacy Items)
Make Informed Decisions
Access Data
Transact Data
WAWF/AIT Infrastructure
UID Registry/Service DSS



Next Steps



The seal is circular with a blue outer ring containing the text "DOD MAINTENANCE" at the top and "MAINTAINING AMERICA'S DEFENSE" at the bottom, separated by two black stars. The center features a white eagle with spread wings perched on a shield. Below the eagle, the words "RENEWING", "REJUVENATING", and "SUSTAINING" are stacked vertically.

USD(AT&L) Policy Memo 23 December, 2004[illegible]



CONOPS for UID Implementation in DoD Depots



Department of Defense
Concept of Operations
(CONOPS)

for

Unique Identification (UID)
Implementation and Employment within
DoD's Organic Maintenance Depots



Preliminary Draft Version 32
October 2004

Prepared by the Office of the Secretary of Defense
Maintenance Policy, Programs and Resources

- **Acquire the authority to mark items**
 - Alternatives and Preferred Alternative
- **Identify which items need to be marked**
 - Alternatives and Preferred Alternative
- **Plan and budget for UID marking capability**
 - Alternatives and Preferred Alternative
- **Develop the capability to mark items**
 - Alternatives and Preferred Alternative
- **Determine where and how to apply the UID mark**
 - Alternatives and Preferred Alternative
- **Mark the item(s)**
 - Alternatives and Preferred Alternative
- **Obtain UID data for each individual item marked**
 - Alternatives and Preferred Alternative
- **Transact data to the UID Registry and other DSSs**
 - Alternatives and Preferred Alternative



Questions?



Back-up Slides



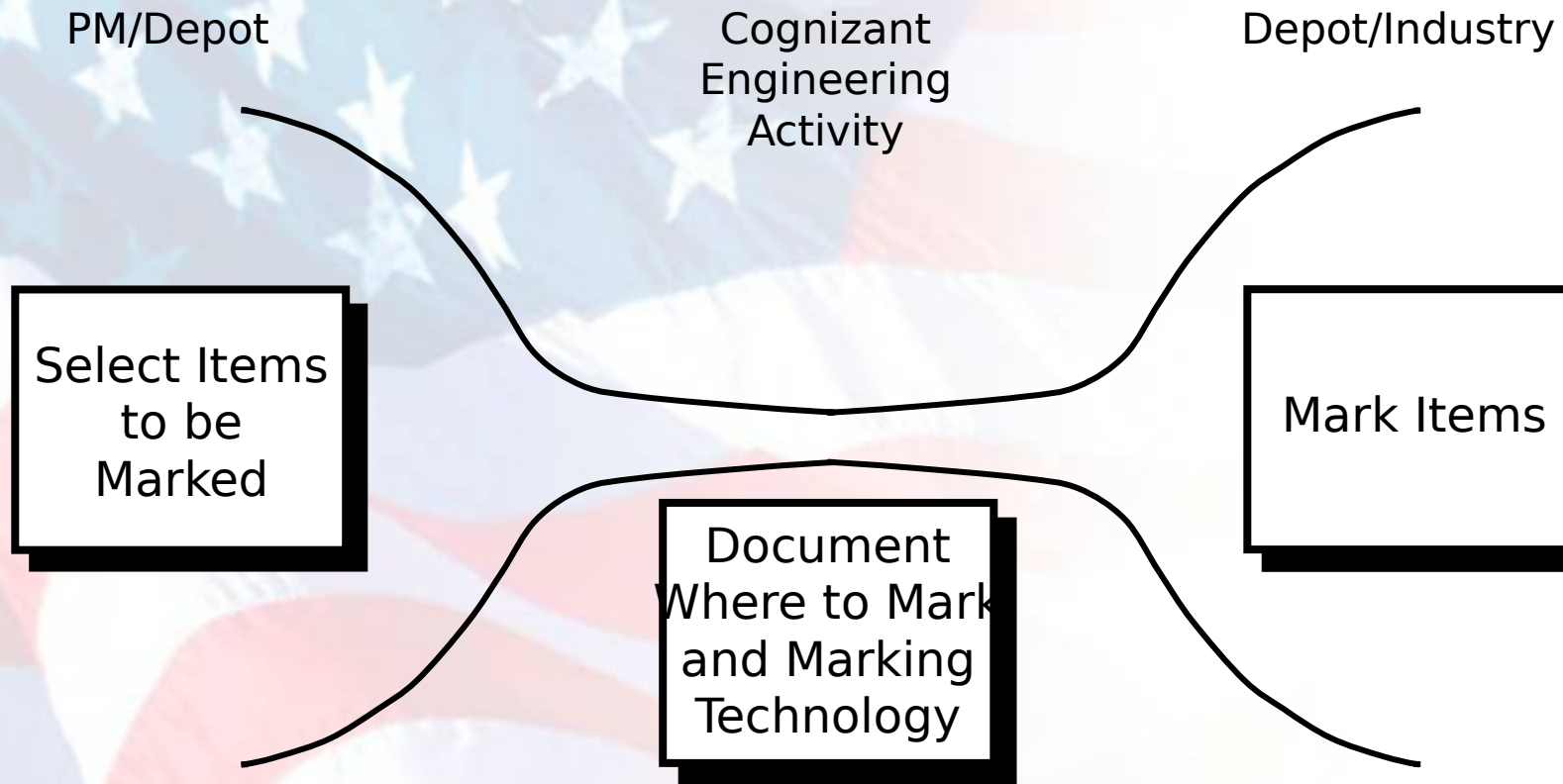
What Materiel is Being Uniquely Identified?



- **Program Managers** will identify items embedded in end items that require unique identification, including embedded subassemblies, components and parts. These embedded items will be identified in a Contract Data Requirements List (CDRL) or Exhibit
- **Contracting Officers** shall include the clause at 252.211-7003, Item Identification and Valuation, in all solicitations and contracts that require delivery of items.
- All items delivered to the Department will be delivered under a contract line item and the Department's acquisition cost of each item will be identified under a contract line item or sub-line item.
- **Contractors** are required to provide unique item identification, or a DoD recognized unique identification equivalent, for all items delivered with an acquisition cost of \$5,000 or more and as designated by the requiring activity for items less than \$5,000.
- Under the clause at 252.211-7003, **marking of items shall be in accord with MIL-STD-130L**, Identification Marking of U.S. Military Property



UID Marking Bottleneck?



Issue



How is DoD Doing UID?

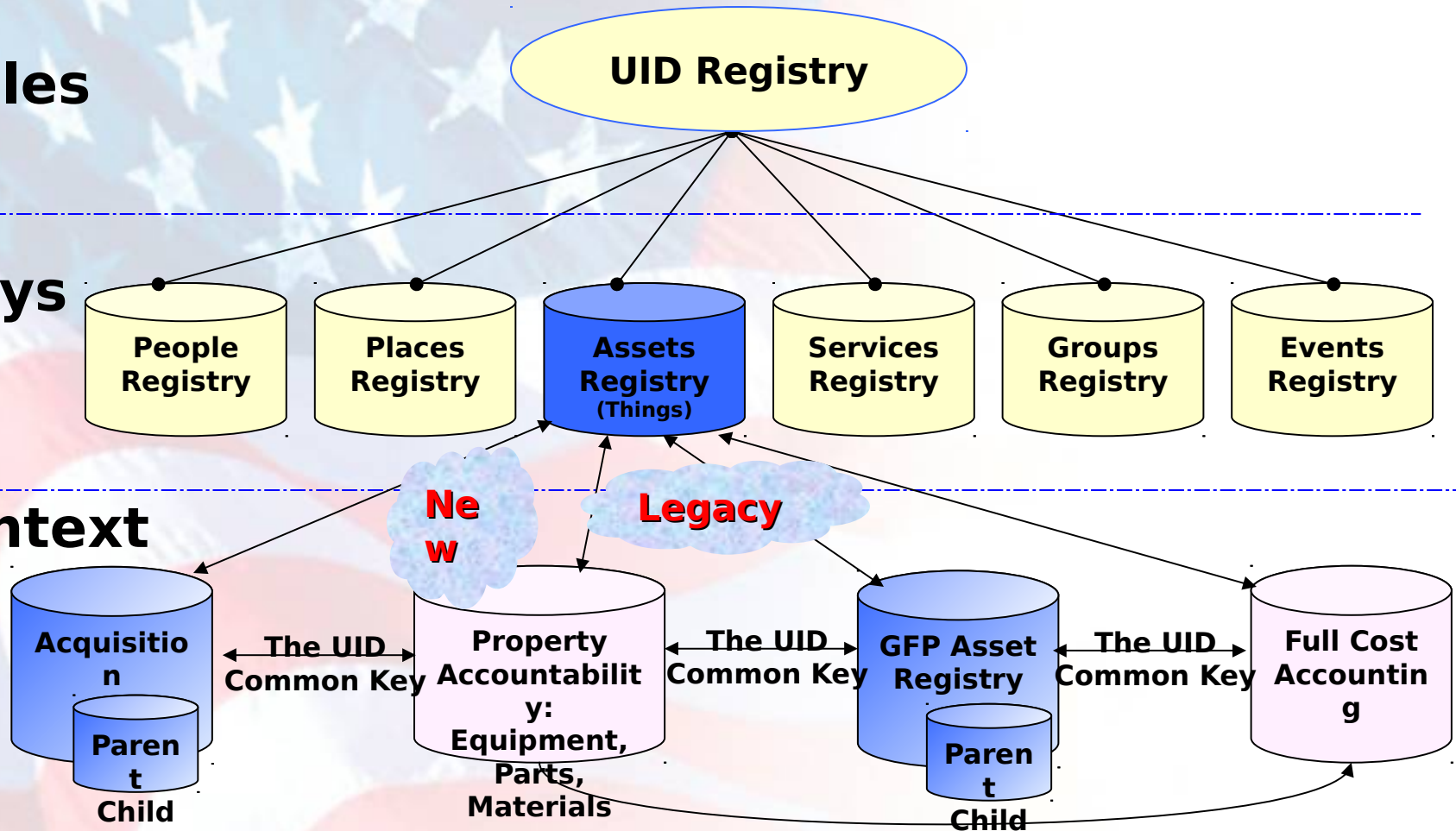
UID Registry Concept



Rules

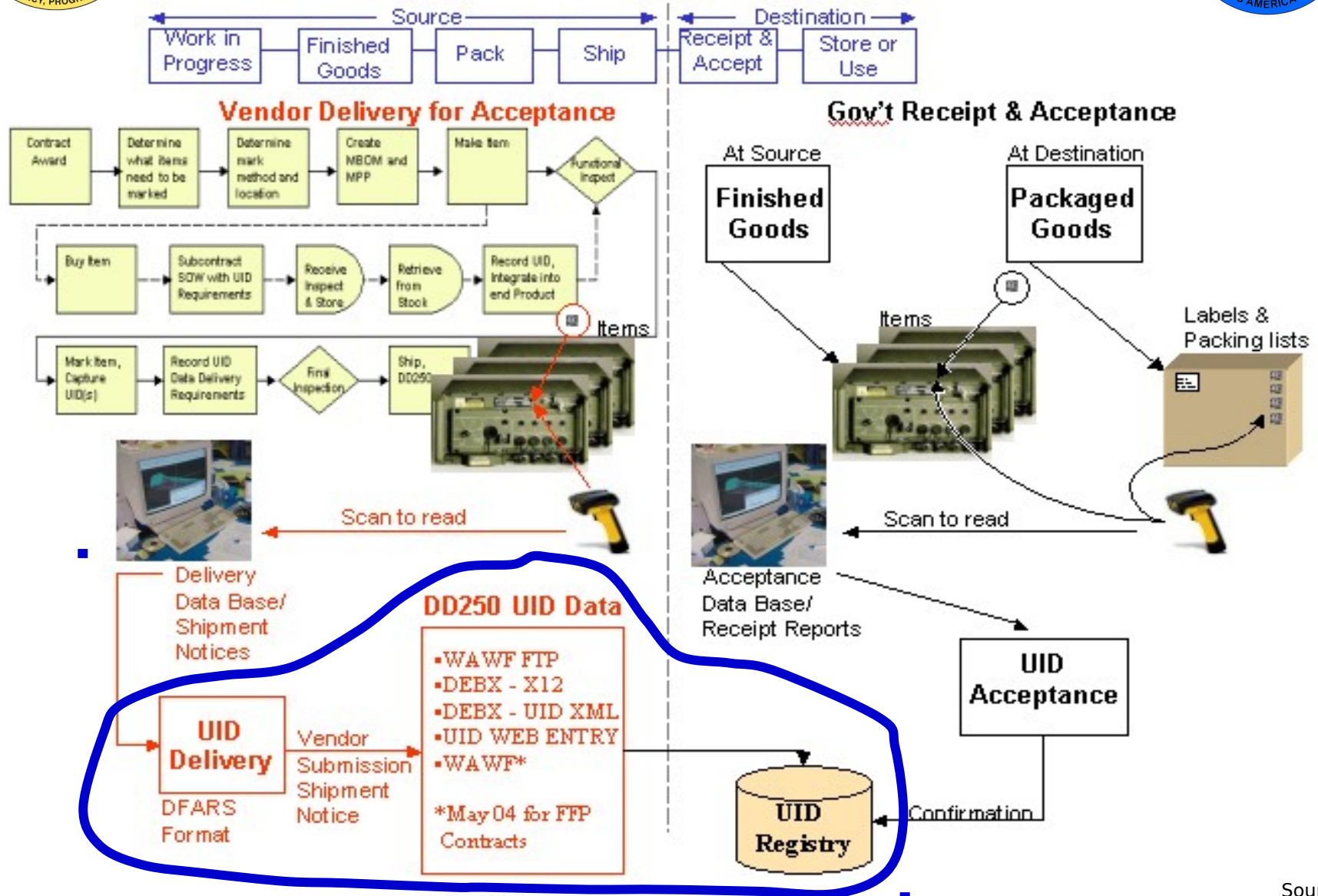
Keys

Context





Vendor Data Submission





Receipt and Acceptance of UID Items

